AMENDMENTS TO THE CLAIMS

1-23. **(CANCELLED)**

24. **(CURRENTLY AMENDED)** A stent for surgical implantation into a patient, said stent being formed from **and defined by** a single **unitary** length of wire which is expandable from a relatively straightened state for introduction into the patient, to an occluding anchor part in which the wire has adopted a series of turns extending over the cross-sectional area of the occluding anchor part, and wherein the wire turns in said occluding anchor part are of

(a) cycloidal form producible by displacing individual turns of a cylindrical helix laterally in different directions and so that they are substantially coplanar, or

(b) spiro-cycloidal form producible by displacing individual turns of a tapering helix laterally in different directions and so that they are substantially coplanar.

25. **(PREVIOUSLY PRESENTED)** A stent as claimed in claim 24, wherein the wire is formed of a shape memory effect material and is self-expanding into its occluding state above a predetermined trigger temperature.

26. **(PREVIOUSLY PRESENTED)** A stent as claimed in claim 24, wherein the wire is formed of a superelastic material which is resiliently biased towards its occluding state and which can be retained in its relatively straightened state.

27. **(PREVIOUSLY PRESENTED)** A stent as claimed in claim 24, wherein the wire, in its occluding state, also defines another anchor part which is spaced from the occluding anchor part and joined thereto by a linking part.

28. **(PREVIOUSLY PRESENTED)** A stent as claimed in claim 27, wherein said another anchor part is of wire having a series of turns extending laterally relative to the linking part.

29. **(PREVIOUSLY PRESENTED)** A stent as claimed in claim 28, wherein the wire turns extend over the cross-sectional area of said another anchor part.

30. **(PREVIOUSLY PRESENTED)** A stent as claimed in claim 28, wherein the wire turns of said another anchor part are not aligned with the wire turns of said occluding anchor part in the direction of separation of the anchor parts.

31. **(PREVIOUSLY PRESENTED)** A stent as claimed in claim 24, wherein the wire turns in said another anchor part are:
    (a) of substantially conical form, or
    (b) of scroll or spiral form, or
    (c) of cycloidal form producible by displacing individual turns of cylindrical helix laterally in different directions and so that they are substantially coplanar or
    (d) of spiro-cycloidal form producible by displacing individual turns of a tapering helix laterally in different directions and so that they are substantially coplanar.

32. **(PREVIOUSLY PRESENTED)** A stent as claimed in claim 24, wherein at least part of the wire is coated with a pharmacological coating.

33. **(PREVIOUSLY PRESENTED)** A stent as claimed in claim 32, wherein the coating is of a protein that initiates blood clotting and cell adhesion.

34. **(CURRENTLY AMENDED)** A stent as claimed in claim 24, wherein at least ~~part if~~ **part of** the wire has a roughened surface.

35. **(CANCELED)**

36. **(CURRENTLY AMENDED)** A releasable connector for releasably interconnecting first and second parts, said connector comprising first and second connector regions separate from but adapted to be secured to the first and second parts, respectively, wherein the first connector region has a shape memory effect and is changeable from a first state to a second state above a predetermined trigger temperature, said first state being one in which the first connector region is adapted to hold the first part and the second state being one in which the first connector region is adapted to release the first part so as to enable the first and second parts to be disconnected.

37. **(PREVIOUSLY PRESENTED)** A releasable connector as claimed in claim 36, wherein the first connector region comprises a first bush part which is adapted, in its first state, to receive and hold the first part.

38. **(PREVIOUSLY PRESENTED)** A releasable connector as claimed in claim 36 wherein the second connector region comprises a second bush part which is adapted to receive and hold the second part when the first connector region is in both of its first and second states.

39. **(PREVIOUSLY PRESENTED)** A stent for surgical implantation into a patient, said stent including a wire which is expandable from a relatively straightened state for introduction into the patient, to an occluding state wherein the wire defines two spirally wound anchor parts interconnected by a link part, the spiral windings of said spirally wound anchor parts being wound in the opposite sense and having central axes which are laterally displaced from one another.

40. **(CURRENTLY AMENDED)** A releasable connector releasably interconnecting a stent with a member for delivering the stent to the required body region, said connector comprising first and second connector regions **separate from but** adapted to be secured to said stent and said member, respectively, wherein the first connector region has a shape memory effect and is changeable from a first state to a second state above a predetermined trigger temperature, said first state being one in which the first connector region is adapted to hold said stent and the second state being one in which the first connector region is adapted to release said stent so as to enable said stent and said member to be disconnected,

and wherein said stent includes a **unitary** wire which is expandable from a relatively straightened state for introduction into the patient, to an occluding state wherein the wire defines an occluding anchor part in which the wire has adopted a series of turns extending over the cross-sectional area of the occluding anchor part, and wherein the wire turn in said occluding anchor part of

(a) cycloidal form producible by displacing individual turns of a cylindrical helix laterally in different directions and so that they are substantially coplanar, or

(b) spirocycloidal form producible by displacing individual turns of a tapering helix laterally in different directions and so that they are substantially coplanar.

41. **(PREVIOUSLY PRESENTED)** A releasable connector as claimed in claim 40, wherein the first connector region comprises a first bush part which is adapted, in its first state, to receive and hold the stent.

42. **(PREVIOUSLY PRESENTED)** A releasable connector as claimed in claim 41, wherein the second connector region comprises a second bush part which is adapted to receive and hold said member when the first connector region is in both of its first and second states.

43. **(CURRENTLY AMENDED)** The stent of claim 24 in combination with a releasable connector comprising:

a. a first connector region **separate from but** adapted to be secured to one end of the length of wire forming the stent, wherein the first connector region has a shape memory effect and is changeable above a predetermined trigger temperature from:

(1) a first state wherein the first connector region is adapted to hold the end of the wire forming the stent, and

(2) a second state wherein the first connector region is adapted to release the end of the wire forming the stent; and

b a second connector region **separate from but** adapted to be secured to a member for delivering the stent to the required body region.

44. **(CANCELED)**

45. **(CANCELED)**

46. **(CURRENTLY AMENDED)** A releasable connector as claimed in claim 40, wherein the stent is formed from **and defined by** a single **unitary** length of wire.

47. **(PREVIOUSLY PRESENTED)** A stent for surgical implementation into a patient, wherein the stent is formed from a single length of wire expandable from:

a. a relatively straight configuration in which it can be conveyed along a catheter for introduction into the patient, to

b. an occluding configuration in which the stent has:

(1) a first anchor part formed from a series of wire turns extending over the cross-sectional area of the first anchor part in a spiral form;

(2) a second anchor part formed from a series of wire turns extending over the cross-sectional area of the second anchor part in a spiro-cycloidal form, and

(3) a linking part between the two anchor parts.

48. **(PREVIOUSLY PRESENTED)** The stent of claim 47 in combination with a releasable connector comprising:

a. a first connector region adapted to be secured to one end of the length of wire forming the stent, wherein the first connector region has a shape memory effect and is changeable above a predetermined trigger temperature from:

(1) a first state wherein the first connector region is adapted to hold the end of the wire forming the stent, and

(2) a second state wherein the first connector region is adapted to release the end of the wire forming the stent; and

b a second connector region adapted to be secured to a member for delivering the stent to the required body region.

49. **(PREVIOUSLY PRESENTED)** The stent of claim 48 wherein the second connector region at least substantially retains a constant shape above and below the trigger temperature.

50. **(PREVIOUSLY PRESENTED)** A stent as claimed in claim 24 in combination with:

a. a catheter containing or adapted to contain said stent in its relatively straightened state;

b. an elongated flexible placement member extending or being adapted to extend longitudinally of said catheter and having proximal and distal ends; and

c. releasable connection means connecting or being adapted to connect the distal ends of the placement member with the stent.

51. **(PREVIOUSLY PRESENTED)** A stent for surgical implementation into a patient, wherein the stent is formed from a single length of wire expandable from:

a. a relatively straight configuration in which it can be conveyed along a catheter for introduction into the patient, to

b. an occluding configuration in which the stent has:

(1) a first anchor part formed from a series of wire turns extending over the cross-sectional area of the first anchor part in a spiral form;

(2) a second anchor part formed from a series of wire turns extending over the cross-sectional area of the second anchor part in a cycloidal form, and

(3) a linking part between the two anchor parts.

52. **(PREVIOUSLY PRESENTED)** A stent for surgical implantation into a patient, said stent including a wire which is expandable from a relatively straightened state for introduction into the patient, to an occluding anchor part at a terminal end of the stent in which the wire has adopted a series of turns extending over the cross-sectional area of the occluding anchor part, and wherein the wire turns in said occluding anchor part are of

(a) cycloidal form producible by displacing individual turns of a cylindrical helix laterally in different directions and so that they are substantially coplanar, or

(b) spiro-cycloidal form producible by displacing individual turns of a tapering helix laterally in different directions and so that they are substantially coplanar.

53. **(NEW)** The stent of claim 39 wherein at least one of the anchor parts is of cycloidal form producible by displacing individual turns of a cylindrical helix laterally in different directions and so that the turns are substantially coplanar.

54. **(NEW)** The stent of claim 39 wherein at least one of the anchor parts is of spiro-cycloidal form producible by displacing individual turns of a tapering helix laterally in different directions and so that the turns are substantially coplanar.

55. **(NEW)** The stent of claim 39 wherein the wire is formed of a shape memory effect material and is self-expanding into its occluding state above a predetermined trigger temperature.

56. **(NEW)** The stent of claim 39 wherein the wire is formed of a superelastic material which is resiliently biased towards its occluding state and which can be retained in its relatively straightened state.

57. **(NEW)** The stent of claim 39 wherein each anchor part is chosen from one of:

(a) a substantially conical form;

(b) a scroll or spiral form;

(c) a cycloidal form producible by displacing individual turns of cylindrical helix laterally in different directions and so that they are substantially coplanar; and

(d) a spiro-cycloidal form producible by displacing individual turns of a tapering helix laterally in different directions and so that they are substantially coplanar.

58. **(NEW)** The stent of claim 39 wherein at least part of the wire is coated with a pharmacological coating.

59. **(NEW)** The stent of claim 39 wherein the coating is of a protein that initiates blood clotting and cell adhesion.

60. **(NEW)** The stent of claim 39 wherein at least part of the wire has a roughened surface.